

Department of Energy

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Mr. Paul T. Day Hanford Project Manager U.S. Environmental Protection Agency 712 Swift Boulevard, Suite 5 Richland, Washington 99352

Mr. David B. Jansen, P.E. Hanford Project Manager State of Washington Department of Ecology P.O. Box 47600 Olympia, Washington 98504-7600



Dear Messrs. Day and Jansen:

COMPLETION OF MILESTONE M-30-04

The U.S. Department of Energy, Richland Field Office (RL) is pleased to submit a report titled "Estimating Aquifer Hydraulic Properties Using the Ferris Method, Hanford Site, Washington" to the U.S. Environmental Protection Agency (EPA) and the State of Washington Department of Ecology (Ecology). The purpose of this report is to complete the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestone M-30-04, "Submit a report (secondary document) to EPA and Ecology evaluating the interaction of the Columbia River and the unconfined aquifer for aquifer hydraulic properties."

The subject report documents an investigation of the relationship between Columbia River stage fluctuation and corresponding water table fluctuations in groundwater monitoring wells ranging from 200 to 1,700 ft from the river. Discussion among Tri-Party Agreement member representatives over the past 11 months resulted in agreement of a well defined scope for this investigation. The scope included:

- 1. Evaluation of published methods for inferring aquifer properties from river/groundwater interaction.
- 2. Determination of suitability of the various methods for use at the Hanford Site.
- 3. Collection of river stage and potentiometric surface elevation data from the 100 Areas.
- 4. Application of the preferred method (the Ferris Method) to Hanford Site-specific data.
- 5. Comparison of results from application of the Ferris Method to estimates derived by other means.

Messrs. Day and Jansen 92-ERB-171

Please address comments or questions regarding this correspondence or Hanford Site 100 Area Past-Practice investigations to Mr. Eric Goller on (509) 376-7326.

Sincerely,

lanford Project Manager

ERD: EDG

cc w/encl:

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